

## **Response to Preventative Maintenance Projects Process Review**

Preventative Maintenance Projects Process Review Prepared by:  
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The UDOT response to the Preventative Maintenance Projects Process Review, dated September 7, 2004, has the following format. First is the finding by the FHWA numbered one to six. Under each numbered finding is the FHWA recommendation. This is followed by the UDOT response to the recommendation. Orange Book and Purple Book Projects are discussed extensively in this Process Review. UDOT does not consider Purple Book Projects to be Preventative Maintenance. Purple Books projects are a subset of the 3R Guideline. The Purple Book addresses only the first "R", Resurfacing for asphalt pavements or work of similar scope and function for concrete pavements.

### **Findings, Recommendations, and UDOT Responses:**

1. Finding: All the projects reviewed were found to be in compliance with all applicable Federal laws, regulations and applicable policies and procedures. All contracts contained DBE goals were applicable, training goals, Davis Bacon Wage Rates, and 1273 Federal-aid contract provisions. All project files also contained the required clearances for NEPA, utilities, and right of way. There was no reference in the project files to the STIP line items that covered these projects and how they were part of a fiscally constrained STIP. The STIP only lists a bucket of projects that address pavement preservation.

Recommendation: The only item that appeared to be missing from individual project files to make them fully compliant with Federal requirements was a clear link to the STIP. Some Regions had the breakout list readily available and others did not. It would be beneficial to have the breakout list included in each project file to demonstrate compliance.

UDOT Response: UDOT agrees with this finding and will implement the following solution. Projects are only listed in the Statewide portion of the Statewide Transportation Improvement Program (STIP) with a bucket of money to address pavement preservation.

As a resolution to this recommendation UDOT will maintain a list of Pavement Preservation projects in the Central Maintenance Division. The Regions will also have a list of pavement preservation projects. The Central Maintenance Division list of projects will have a direct link back to the current STIP reference number. For a quick list of projects the Electronic Project Management (ePM) system is available to reference by master pin, type of funds, and expenditures. All Regions have access to

ePM and are able to retrieve information. Pavement preservation projects are set up on an annual basis.

In order to maintain the flexibility of the funding for pavement preservation projects Program Development will continue to list a bucket of money for these projects in the STIP. Given the quick turn around of these projects, usually done in one construction season, it is not recommended to have each individual project listed in the STIP. It would be difficult to maintain a quick turn around time for these projects if UDOT followed the STIP process. Changes to a project would require a STIP amendment or adjustment constituting a commission approval or MPO committee approval. This could add months to the project schedule.

2. Finding: Not all projects reviewed in the field had addressed all the appropriate safety items. On the projects where the safety items had not been addressed, a commitment has been made in these few instances that the items would be upgraded within the next year.

Recommendation: UDOT is encouraged to fully implement the Purple Book Development Guide and to update the companion guide for Orange Book projects.

UDOT Response: UDOT agrees with this finding. The Purple Book Scoping and Development Guidelines have been implemented by UDOT during the preparation of this Process Review document. Central Maintenance will update the Orange Book Process and incorporate safety items by October 2005. For additional information on specific safety items see finding number four. Once the Orange Book Process is finalized the document will be communicated and distributed to Project Managers, Preconstruction Engineers, and other UDOT employees as necessary.

3. Finding: The recently approved “Purple Book Scoping and Development Process Guidelines” were considered very beneficial by all those contacted for the identification, scoping and PS&E preparations of Purple Book projects. All the individuals responsible for developing these projects were aware of the Guidelines and were using them. The companion document for Orange Books “Statewide Transportation Preservation program Development Process –STPP-Orange Book Projects” on the other hand was not widely known about within the various UDOT Regions.

Recommendation: UDOT should re-draft the Orange Book Scoping and Development Process Guidelines to be more consistent in format with the recently approved Purple Book Guide. This is especially important as it is our understanding that Design Study Reports will no longer be developed for these types of projects. There should be a concerted effort to distribute this document to all UDOT personnel with responsibility in this area.

UDOT Response: UDOT agrees with the recommendation to re-draft the Orange Book Scoping and Development Process Guidelines consistent with the Purple Book format. See recommendation and response number two. Orange Books have never required a DSR. Purple Books have required a DSR as part of the 3R requirements.

Purple Book projects will continue to be subject to the same requirements in relation to a DSR as other Blue or Green Book projects. Both the Purple Book Scoping and Development Guidelines and the new Orange Book Guidelines, when completed, will be distributed to the Project Managers, Preconstruction Engineers, and other UDOT employees as necessary.

4. Finding: The recently *Drafted* Orange Book Project Safety Requirements Policy – UDOT 06C-OB was discussed with all individuals contacted. All indicated that this would be a good addition to a new Guidance Document for Orange Book projects and that a companion policy should be developed for Purple Book Projects to go along with that Guide.

Recommendation: UDOT should finalize the *Draft* Orange Book Project Safety Requirements Policy and should develop a similar Policy Statement for Purple Book projects.

UDOT Response: The UDOT agrees in part with this finding. UDOT agrees guidelines need to be included in Purple Book and Orange Book projects. The Purple Book Scoping and Development Process Guidelines already include safety requirements. The Orange Book Guidelines will include the following to be implemented in finding number two:

1. Removal of Texas Turndown guardrail end sections. These devices should be replaced with the appropriate end section based on the current version of the AASHTO “Roadside Design Guide”.
2. ADAAG compliant pedestrian ramps except on Fog Seal, Slurry Seal, and Chip Seal. This requirement is for pedestrian ramps not meeting 2004 or later ADAAG standard. All non-compliant ADAAG pedestrian ramps will be corrected ten years after the signed date of stipulation for Decker vs. UDOT.

The following safety items are to be addressed with the Orange Book project, or in a separate safety project to be completed within one year of the Orange Book project, or in a programmed STIP project completed within three years.

1. Substandard guardrail. These include height or configuration.
2. Blunt ends on bridges or barriers.
3. Bridge transitions must meet NCHRP 230 Criteria.
4. Rumble strips in accordance with UDOT Standard Drawings.

Exceptions to the above requirements may be made by following the established UDOT Design Exception process.

5. Finding: There was confusion in all Regions as to the color coding of project types; if it was going to remain a UDOT definition or go away, and even though projects were scoped out and designed to a specific criteria (Orange, Purple, Blue, Red), when the projects were sent to the Complex to be assembled and prepared for advertisement they often came back with a different color cover on the contract document. There was also some confusion as to the future of Design Study Reports and when they would be required.

Recommendation: Direction needs to be provided relative to the policy on the use of the color coding system and the future of Design Study Reports.

UDOT Response: UDOT agrees with this recommendation. The Federal Advertising Checklist has been modified to include a box for the Project Manager to check if the project being submitted as Blue, Purple, or Orange. The State Advertising Checklist has been modified to include a box for the Project Manager to check if the project being submitted is Green, Orange, Purple, or Red. This requirement will help the Project Manager and the Advertising Section understand at time of submittal to the Advertising Section the project color-coding system. The Federal and State Advertising Checklists were updated January 1, 2005. The necessity of future Design Study Reports is being reviewed. UDOT currently believes that the DSR is not in the correct Design Activity because the project is mostly designed when the DSR is to be completed. The DSR is being reviewed to include with the Scoping Meeting and part of the Scoping Report.

6. Finding: The UDOT Federal Advertising Checklist is an excellent tool to make sure that all required elements of the project development process have been completed and included. The checklist was updated while this process review was being conducted to include a line item that requires the Region Traffic Engineer to sign off that all safety features have been addressed for the project. FHWA commends UDOT for quickly making this important change.

Recommendation: The UDOT Federal Advertising Checklist should also have sign-off boxes to indicate that several other required Federal provisions are included in the documentation, including: NEPA clearance, Section 1273 Contract Provisions, and that the project is included in the current STIP.

UDOT Response: UDOT agrees with the general thought of the recommendation. The Federal and State Advertising Checklists are documents that are always changing. Changes to the checklists will be implemented as practical where agreed. UDOT will follow up on the suggestions mentioned in the recommendation.

### **Follow Up and Closure of Recommendations:**

Project Development will be responsible to follow up and close the items in this Preventative Maintenance Projects Process Review with Todd Emery. This includes communication, discussion, and notification to the FHWA. Project Development will also be responsible for distribution to UDOT employees. The Maintenance Division will be responsible for updating/re-writing the Orange Book Guidelines.

Attached with the UDOT Response is the Preventative Maintenance Projects Process Review and the Purple Book Scoping and Development Process Guidelines.